# THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

# UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES Ex parte CHARLES K. HARRIS and MICHAEL C. ZEMEK Appeal No. 1997-1201 Application No. 08/200,6161 ON BRIEF ON BRIEF

Before THOMAS, HAIRSTON, and DIXON, **Administrative Patent Judges**. DIXON, **Administrative Patent Judge**.

# **DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-17, which are all of the claims pending in this application.

V	We REVERSE.	
1	Application for patent filed February 18, 199	<del>)</del> 4.

# **BACKGROUND**

The appellants' invention relates to a high speed lead inspection system using back lighting of the leads and calibration marks on the track. Both the leads and the track are viewed at the same time on a common display with the calibration markings on the track. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A lead inspection system utilizing image capture to determine defects in lead placement, comprising:

a track for holding a semiconductor device to be inspected;

means for viewing a first side of said track and leads of said semiconductor device under inspection to form a first image and a second side of said track and leads of said semiconductor device under said inspection to form a second image;

an optical system for combining said first image and said second image of said first side and said second side into one video display; and calibration marks on said first side and said second side of said track adjacent the leads of said semiconductor device for providing calibration information with the leads to determine a position of the leads.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Spigarelli et al. (Spigarelli)	4,914,513	Apr. 03, 1990
Frazee, Jr. et al. (Frazee)	4,973,343	Nov. 27, 1990
Chemaly	5,058,177	Oct. 15, 1991
Howell	5,237,622	Aug. 17, 1993

Claims 1-6, 8-13 and 15-17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Chemaly in view of Spigarelli and Howell. Claims 7 and 14 stand

rejected under 35 U.S.C. § 103 as being unpatentable over Chemaly, Spigarelli and Howell in view of Frazee.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 12, mailed May 27, 1996) for the examiner's reasoning in support of the rejections, and to the appellants' brief (Paper No. 10, filed April 8, 1996) and reply brief (Paper No. 13, filed August 2, 1996) for the appellants' arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. **See In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See In re Lintner**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed

subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. **See In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Similarly, the examiner must address the explicit limitations set forth in the claim to set forth the *prima facie* case of lack of novelty or obviousness.

Appellants argue that each of the individual references does not teach or suggest the invention set forth in claims 1, 8 and 15. (See brief at pages 4-5.) Appellants' arguments to the individual references are not persuasive since the rejection is based on a combination of references.

Appellants argue the "the claims-in-issue clearly require that the two images be combined into one image, and providing a split-screen image does not combine two images into one image." (See brief at page 5.) We disagree with appellants. The language of the independent claims requires only that the two images be combined into one video display. The split screen of Spigarelli would have been a teaching of a single video display.

Appellants argue that "[t]he present invention includes means for determining the position of the leads through the calibration marks and images of the first and second sides." (See brief at page 5.) We disagree with appellants. The language of the independent claims does not set forth a "means for determining the position of leads" as appellants argue. This argument is not persuasive.

Appellants argue that:

The present invention provides a distinct and sharp image of a lead outline without requiring a device to be rotated so as to present both sides of the device, and instead provides both sides of the device simultaneously.

None of the applied prior art references could achieve this important advantage.

See brief at page 5. Again, this argument is directed to the individual references and is therefore not persuasive.

Appellants generally argue that the combination of references does not teach or suggest the claimed limitation to "the optical system for combining the first and second images of the first and second sides into one video display." (See brief at page 6.) Appellants have not stated the above argument in the following way, but we note that the independent claims require that the first image and the second image each contain a view of both the track, which includes calibration marks, and the leads. We agree with appellants that the prior art references do not teach or suggest the invention as claimed. Furthermore, the examiner has not shown how or why the prior art would have taught or

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suggested to one of ordinary skill in the art to view both sets of leads and both sides of the track at the same time in one video display.

The examiner maintains that Spigarelli teaches viewing different sides of a semiconductor device and multiple images on a common video display. (See answer at page 10.) We disagree with the examiner. Spigarelli at most teaches viewing multiple portions of a semiconductor package on a common video display, but not the sides of a track. Furthermore, Spigarelli is concerned with alignment of the semiconductor rather than inspection of the leads. Howell is similarly concerned with the alignment of the semiconductor and not the inspection of the leads. Chemaly views the leads from below so that the sides of the track are not viewed in the images. The examiner has not set forth a line of reasoning why it would have been obvious to one of ordinary skill in the art at the time of the invention to either view the sides of the track or to incorporate calibration marks thereon. The examiner maintains that "one skilled in the art would certainly have no difficulty in modifying the single camera system of Howell to provide the multiple viewing of the combination of images of the first and second sides and calibration marks as shown in Howell to derive the claimed invention." (See answer at page 11.) Assuming arguendo that the skilled artisan would not have difficulty in combining the teachings of the references, the examiner has not addressed the motivation of the skilled artisan to make such a combination. (See answer at pages 5-7.) The examiner's motivation statements are merely conclusions that the skilled artisan would have been able to make the

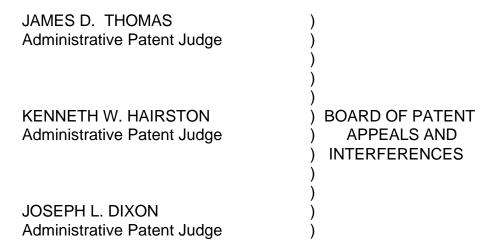
combination of the teachings into the claimed invention. Therefore, we will not sustain the rejection of claims 1, 8 and 15. Nor will we sustain the rejection of the dependent claims therefrom.

With respect to the rejection of dependent claims 7 and 14, Frazee does not remedy the deficiency in the original combination of teachings by the examiner, nor has the examiner provided a motivation for the combination of Frazee with Chemaly, Spigarelli and Howell. Therefore, we will not sustain the rejection of claims 7 and 14.

## CONCLUSION

To summarize, the decision of the examiner to reject claims 1-17 under 35 U.S.C. § 103 is reversed.

# **REVERSED**



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